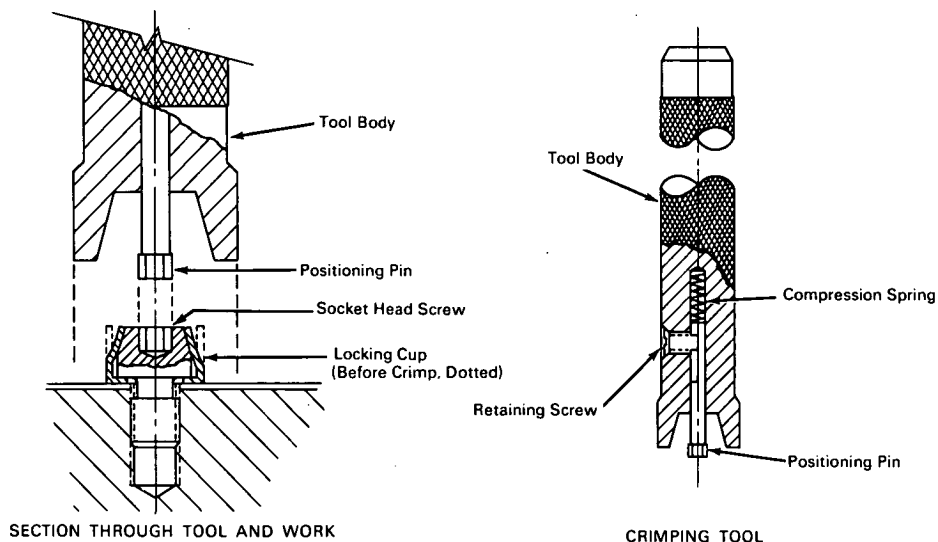


# NASA TECH BRIEF



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## Screw Locking Cups Quickly and Neatly Crimped



**The problem:** Previous methods of crimping locking cups around socket head screws have been of the brute force variety and frequently result in damage to the cup.

**The solution:** A tool that quickly and neatly crimps the locking cup in a simple straightforward operation.

**How it's done:** The tool consists of a body that incorporates the crimping die, a positioning pin, a retaining screw, and a compression spring that maintains the positioning pin in extended position ready for use. The tool is placed with the positioning pin engaged in the socket of the screw, depressed until the tool body contacts the locking cup and the operation is completed with a hammer blow. The positioning pin has a short slot similar to a keyway on one side that permits sufficient travel when the crimp is made.

### Notes:

1. With slight design modifications and an assortment of positioning pins the tool could be used for slotted or cross-recessed head screws.
2. The tool could be used without a positioning pin for locking conventional hex nuts or bolts.
3. Inquiries concerning this innovation may be directed to:

NASA Space Nuclear Propulsion Office  
Technology Utilization Branch  
U.S. Atomic Energy Commission Bldg.  
Germantown, Maryland  
Reference: B65-10049

**Patent status:** NASA encourages commercial use of this innovation. No patent action is contemplated.

Source: Westinghouse Electric Corporation  
under contract to NASA Space Nuclear  
Propulsion Office (NU-0009)

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